OPEN FILE REPORT 79-084 PLATE 12 OF 35 UNITED STATES COOK CREEK RESERVOIR QUADRANGLE OPEN-FILE REPORT DEPARTMENT OF THE INTERIOR This report has not been edited for conformity with MONTANA U.S. Geological Survey editorial standards or GEOLOGICAL SURVEY 7.5 MINUTE SERIES (TOPOGRAPHIC) stratigraphic nomenclature. 106°15′ 45°45 R 44 E. R. 45 E. 18 14 22 24 24 20 **EXPLANATION** NON-FEDERAL COAL LAND-Land for which the Federal Government does not own the coal rights. STRIPPING-LIMIT LINE—Boundary for surface mining of the coal bed (in this quadrangle, the 500-foot 26 28 30 overburden isopach). Arrows point toward the area suitable for surface mining. Recovery factor of 85 percent within that area of this quadrangle. BOUNDARY OF COAL 5 FEET OR MORE THICK-Drawn along the outcrop of coal bed and/or the inferred contact between burned and unburned coal, and/or the 5-foot coal isopach. Arrows point toward area of coal 5 feet or more thick. POINT OF MEASUREMENT ON COAL BED 34 Point of measuren Indicated of coal bed 0.46 0.54 1.85 1.57 0.67 0.57 R(85%) 0.51 0.43 1.98 1.69 3.53 9.77 4.15 8.30 1.97 1.67 1.03 1.13 12 10 Inferred resources R(85%) 0.67 0.79 0.16 0.14 4.37 3.72 0.05 0.49 0.41 R(85%) 0.10 0.90 0.02 0.03 0.01 0.01 4.32 3.67 11.84 10.06 R(85%) 3.77 1.51 1.28 4.48 3.81 2.91 2.48 18 17 13 RB R(85%) 0.35 0.30 5.66 4.81 6.18 5.25 2.07 0.12 -SL-DIAGRAM SHOWING COMPONENT AREAS OF RB R(85%) IDENTIFIED COAL RESOURCES—Shows arcuate 0.01 0.01 boundary lines enclosing areas of measured, indicated, and inferred coal resources. Boundaries of areas are dashed where projected from an adjacent quadrangle. Areas of measured, indicated, or inferred resources may be present on this map without their outer 21 boundaries being shown. 22 1.28 (Measured resources) 3.81 (Indicated resources) R(85%) 4.48 2.48 (Inferred resources) 2.91 0.25 0.22 IDENTIFIED COAL RESOURCES-Showing totals for 2 28 1.94 0.86 0.73 1.47 1.25 Reserve Base (RB) and Reserves (R), in millions of short 0.61 0.52 7.48 6.36 tons, for each section or part(s) of a section of Federal coal land within the stripping-limit line. Dash indicates 7.37 6.26 no resources in that category. Reserve Base (RB) X the Recovery Factor (85 percent) = Reserves (R). 0.03 (Measured resources) 2.07 (Indicated resources) 0.35 0.30 0.01 (Inferred resources) IDENTIFIED COAL RESOURCES-Showing totals for Reserve Base (RB), in millions of short tons, for each section or part(s) of a section of Federal coal land outside the stripping-limit line. Dash indicates no resources in that category. 0.59 0.51 R(85%) 1.89 2.22 0.41 0.35 To convert short tons to metric tons, multiply short tons by 0.42 + 0.36 2.73 2.32 2.49 2.12 45°37′30″ 12'30" (WILLOW CROSSING) 4775 II SW To convert feet to meters, multiply feet by 0.3048. SCALE 1:24 000 Compiled in 1977 Base map from U.S. Geological Survey, 1966 To convert miles to kilometers, multiply miles by 1.61. 1 KILOMETER NOTE: Recovery factors have not been established for / 15½° /276 MILS underground development of coal in this quadrangle. Therefore, Reserves (R) were not calculated for the coal MONTANA bed in areas outside the stripping-limit line. COAL RESOURCE OCCURRENCE MAP OF THE COOK CREEK RESERVOIR QUADRANGLE, POWDER RIVER AND ROSEBUD COUNTIES, MONTANA

BY

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AREAL DISTRIBUTION AND TONNAGE MAP OF IDENTIFIED RESOURCES OF THE UPPER SPLIT OF THE E COAL BED

PLATE 12